

## String of PEARLS

### Practical Evidence About Real Life Situations

#### about neurology

**PEARLS** are succinct summaries of Cochrane Systematic Reviews for primary care practitioners—developed by Prof. Brian McAvoy for the Cochrane Primary Care Field ([www.cochraneprimarycare.org](http://www.cochraneprimarycare.org)), New Zealand Branch of the Australasian Cochrane Centre at the Department of General Practice and Primary Health Care, University of Auckland ([www.auckland.ac.nz/uoa](http://www.auckland.ac.nz/uoa)), funded by the Ministry of Health ([www.health.govt.nz](http://www.health.govt.nz)), and published in NZ Doctor ([www.nzdoctor.co.nz](http://www.nzdoctor.co.nz)).

Bromocriptine is effective in early Parkinson's disease

Treadmill training can improve gait in Parkinson's disease

Physiotherapy effective for Parkinson's disease

Balance of risk and benefits of dopamine agonist therapy for early Parkinson's disease remains unclear

Interferon beta is effective for delaying progression to multiple sclerosis

Anticholinergics ineffective for urinary symptoms in multiple sclerosis

Calcium antagonists of no benefit in Duchenne muscular dystrophy

**DISCLAIMER:** PEARLS are for educational use only and are not meant to guide clinical activity, nor are they a clinical guideline.



## Antihypertensive drugs for mild hypertension: questionable benefits

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**THE PROBLEM:** Hypertension and associated cardiovascular disease can pose significant risk to patients; however, 60% of patients treated with antihypertensive drugs have mild hypertension (systolic blood pressure [BP] 140–159 mm Hg and/or diastolic BP 90–99 mm Hg) and no cardiovascular disease. Data from studies that examine the benefits of these drugs in those with moderate or severe hypertension have often been extrapolated to the patient group as a whole. Recently, it has been questioned whether treating patients who have mild hypertension with antihypertensive drugs is appropriate, considering the proven potential harms (hip fracture, drug-related hospital admissions, and poor self-rated physical and mental health).<sup>1</sup>

**CLINICAL BOTTOM LINE:** Antihypertensive drugs used in the treatment of patients without a previous cardiovascular event (primary prevention) with mild hypertension do not significantly reduce mortality, cardiovascular events, coronary heart disease, or stroke. To put this in perspective, 400 people would have to be treated for five years to prevent one death, 128 people would have to be treated for five years to prevent one cardiovascular event, and there is a near 1 in 10 chance of an adverse effect. Therefore, non-drug, lifestyle treatments, such as diet, exercise and stress management advice should be considered for those with mild hypertension.

#### Antihypertensive drugs for the treatment of mild hypertension

	Success	Evidence	Harms
<b>Reduction in mortality</b>	No significant difference to no treatment	Cochrane review <sup>2</sup>	9% chance of an adverse effect that would require withdrawal from treatment
<b>Reduction in stroke, CHD and cardiovascular events</b>	No significant difference to no treatment		

CHD Coronary heart disease

#### References

- Martin SA, Boucher M, Wright JM, Saini V. Mild hypertension in people at low risk. *BMJ*. 2014;349:g5432.
- Diao D, Wright JM, Cundiff DK, Gueyffier F. Pharmacotherapy for mild hypertension. *Cochrane Database Syst Rev*. 2012;(8):CD006742.

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